

## CLAIMS

What is claimed is:

- 1     1.     A method comprising:  
2             receiving from a requester a request to access an information;  
3             if a link to a first remote computer containing the information is down,  
4     establishing the link while concurrently returning a plurality of imposter responses  
5     until the link is established.
- 1     2.     The method of Claim 1 wherein the request is a request to access information  
2     about a second remote computer identified by a domain name.
- 1     3.     The method of Claim 1 wherein the plurality of imposter responses comprise a  
2     plurality of imposter domain names.
- 1     4.     The method of Claim 3 wherein returning a plurality of imposter domain  
2     names comprises:  
3             appending a text string to the domain name to create a current imposter  
4     domain name that is one of the plurality of imposter domain names; and  
5             instructing the requester that the domain name is an alias for the current  
6     imposter domain name.
- 1     5.     The method of Claim 4 further comprising:  
2             recursively receiving from the requester a plurality of requests to access  
3     information about a remote computer identified by one of the plurality of imposter  
4     domain names; and  
5             if the link remains down, continuing to establish the link, incrementing the  
6     current imposter domain name to form a next current imposter domain name of the  
7     plurality of imposter domain names, and instructing the requester that the current  
8     imposter domain name is an alias for the next current imposter domain name.

1 6. The method of Claim 5 further comprising:  
2 detecting that the link is established; and  
3 after the link is established,  
4 converting the current imposter domain name to the domain name; and  
5 informing the requester that the imposter domain name is an alias for  
6 the domain name.

1 7. The method of Claim 6 further comprising:  
2 receiving from the requester a second request to access the information after  
3 the link is established.

1 8. The method of Claim 7 further comprising:  
2 after the link is established,  
3 forwarding the second request to the first remote computer;  
4 receiving a response to the second request; and  
5 forwarding the response to the second request to the requester.

1 9. The method of Claim 7 wherein the second request is a request to access  
2 information about the second remote computer identified by the domain name.

1 10. The method of Claim 5 further comprising:  
2 determining whether a maximum number of recursions has been exceeded,  
3 and if so, returning an appropriate error.

1 11. The method of Claim 5 further comprising:  
2 determining whether a maximum amount of time has been exceeded, and if so,  
3 returning an appropriate error.

1 12. The method of Claim 1 wherein the requester is a domain name system (DNS)  
2 resolver.

1 13. The method of Claim 1 wherein the request is initiated by a local application  
2 program.

1 14. The method of Claim 1 wherein the request is initiated by a remote application  
2 program.

1 15. The method of Claim 1 wherein the first remote computer is a server.

1 16. The method of Claim 1 wherein the link is a network connection.

1 17. The method of Claim 1 wherein the requester is an Internet web browser, the  
2 request is an hypertext transfer protocol (HTTP) "get" instruction, and the plurality of  
3 imposter responses comprise at least one temporary web page and at least one HTTP  
4 "meta refresh" instruction.

1 18. A method comprising:  
2 receiving a domain name system (DNS) request initiated by an application  
3 program;  
4 if no Internet connection has been established, precluding a user from  
5 receiving an error message by establishing a dial-up connection to the Internet while  
6 concurrently returning a plurality of imposter domain names until the dial-up Internet  
7 connection is established.

1 19. The method of Claim 18 wherein returning comprises:  
2 forming a current imposter domain name by appending an information to the  
3 domain name; and  
4 sending a canonical name (CNAME) response stating that the domain name is  
5 an alias for the current imposter domain name.

1 20. The method of Claim 19 further comprising:  
2 while establishing the dial-up connection, recursively  
3 receiving from the application program a request to access information  
4 about a remote computer identified by one of the plurality of imposter domain  
5 names;

6 forming a next current imposter domain name of the plurality of  
7 imposter domain names by modifying a portion of the information of the  
8 current imposter domain name; and  
9 sending a CNAME response stating that the current imposter domain  
10 name is an alias for the next current imposter domain name.

1 21. The method of Claim 20 further comprising:  
2 detecting that the dial-up connection is established; and  
3 after the dial-up connection is established,  
4 converting the current imposter domain name to the domain name; and  
5 sending a CNAME response stating that the current imposter domain  
6 name is an alias for the domain name.

1 22. The method of Claim 21 further comprising:  
2 receiving from the application program a second request to access information  
3 about the remote computer identified by the domain name after the dial-up connection  
4 is established.

1 23. The method of Claim 22 further comprising:  
2 after the dial-up connection is established,  
3 forwarding the second request to a server;  
4 receiving a response to the second request; and  
5 forwarding the response to the application program.

1 24. A network host comprising a processor and a machine readable medium  
2 containing instructions which when executed by the processor cause the processor to  
3 perform operations comprising:  
4 receiving from a requester a request to access an information;  
5 if a link to a first remote computer containing the information is down,  
6 establishing the link while concurrently returning a plurality of imposter responses  
7 until the link is established.

1 25. The network host of Claim 24 wherein the request is a request to access  
2 information about a second remote computer identified by a domain name.

1 26. The network host of Claim 24 wherein the plurality of imposter responses  
2 comprise a plurality of imposter domain names.

1 27. The network host of Claim 26 wherein returning a plurality of imposter  
2 domain names comprises:  
3 appending a text string to the domain name to create a current imposter  
4 domain name that is one of the plurality of imposter domain names; and  
5 instructing the requester that the domain name is an alias for the current  
6 imposter domain name.

1 28. The network host of Claim 27 wherein the instructions cause the processor to  
2 perform further operations comprising:  
3 recursively receiving from the requester a plurality of requests to access  
4 information about a remote computer identified by one of the plurality of imposter  
5 domain names; and  
6 if the link remains down, continuing to establish the link, incrementing the  
7 current imposter domain name to form a next current imposter domain name of the  
8 plurality of imposter domain names, and instructing the application program that the  
9 current imposter domain name is an alias for the next current imposter domain name.

1 29. The network host of Claim 28 wherein the instructions cause the processor to  
2 perform further operations comprising:  
3 detecting that the link is established; and  
4 after the link is established,  
5 converting the current imposter domain name to the domain name; and  
6 informing the requester that the imposter domain name is an alias for  
7 the domain name.

1 30. The network host of Claim 29 wherein the instructions cause the processor to  
2 perform further operations comprising:  
3 receiving from the requester a second request to access the information after  
4 the link is established.

1 31. The network host of Claim 30 wherein the instructions cause the processor to  
2 perform further operations comprising:  
3 after the link is established,  
4 forwarding the second request to the first remote computer;  
5 receiving a response to the second request; and  
6 forwarding the response to the second request to the requester.

1 32. The network host of Claim 24 wherein the requester is a domain name system  
2 (DNS) resolver.

1 33. The network host of Claim 24 wherein the request is initiated by an  
2 application program on the host.

1 34. The network host of Claim 33 wherein the application program is an Internet  
2 web browser.

1 35. The network host of Claim 24 wherein the request is initiated by an  
2 application program on a remote host.

1 36. The network host of Claim 24 wherein the requester is an Internet web  
2 browser, the request is an hypertext transfer protocol (HTTP) "get" instruction, and  
3 the plurality of imposter responses comprise at least one temporary web page and at  
4 least one HTTP "meta refresh" instruction.